

**Serial No. 10/667,264**  
**Atty. Doc. No. 2003P12157US**

**Amendments to the Claims:**

Please amend the claims as shown.

1. (original) A material adapted for use in a high temperature environment comprising:
  - an oxide-oxide ceramic matrix composite material;
  - a layer of ceramic insulating material bonded to a surface of the ceramic matrix composite material, the insulating material further comprising:
    - a plurality of hollow particles, each particle in contact with at least one other of the particles; and
    - an aluminum hydroxyl chloride binder at least partially filling gaps between the particles.
2. (original) The material of claim 1, further comprising an oxide filler material dispersed among the particles, the binder at least partially filling gaps between the particles and the filler material.
3. (original) The composite material of claim 1, wherein the particles comprise a close packed array of hollow oxide-based spheres with each sphere in contact with a plurality of other of the spheres.
4. (original) The composite material of claim 1, wherein the particles each comprise a hollow sphere formed of a wall material comprising 82% mullite spheres and 18% alumina.
5. (original) The composite material of claim 1, further comprising a layer of adhesive disposed between the ceramic matrix composite material and the ceramic insulating material.
6. (original) The composite material of claim 1, wherein the ceramic matrix composite material comprises fibers comprising alumina and silica disposed in an aluminosilicate matrix.

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7. (original) The composite material of claim 1, wherein the ceramic matrix composite material comprises fibers comprising alumina and silica disposed in an alumina matrix.

8. (original) A material adapted for use in a high temperature environment comprising:

a plurality of hollow oxide-based particles of various dimensions;  
an aluminum hydroxyl chloride binder at least partially filling gaps between the particles;  
whereby the particles are situated in the binder such that each particle is in contact with at least one other particle.

9. (original) The material of claim 8, further comprising an oxide filler material dispersed among the particles, the binder at least partially filling gaps between the particles and the filler material.

10. (original) The material of claim 8, wherein the particles comprise a close-packed array of hollow oxide-based spheres.

11. (original) The material of claim 8, wherein the particles each comprise a hollow sphere formed of a wall material comprising 82% mullite spheres and 18% alumina.

12-26. (canceled)